

20076-02-003

**PROPOSED RESIDENTIAL DEVELOPMENT
AT LANDS AT CAPDOO & ABBEYLANDS,
CLANE, CO. KILDARE**

MOBILITY MANAGEMENT PLAN

for

Westar Investments Limited

December 2020



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1 Introduction

1.1 BACKGROUND

Roadplan Consulting was commissioned by the Westar Investments Limited to prepare a Mobility Management Plan for the proposed residential development at lands at Capdoo & Abbeylands, Clane, Co. Kildare.

In preparing this Plan Roadplan Consulting have taken account of the guidance provided in document 'Mobility Management Plans - DTO Advice Note' and the requirement set out in 'The Kildare County Development Plan 2017 – 2023'.

1.2 DEVELOPMENT

The site is located at lands at Capdoo & Abbeylands, Clane, Co. Kildare and is a mixed development. The proposed mixed development is shown on Figure 1.1 'Site Location Map'.

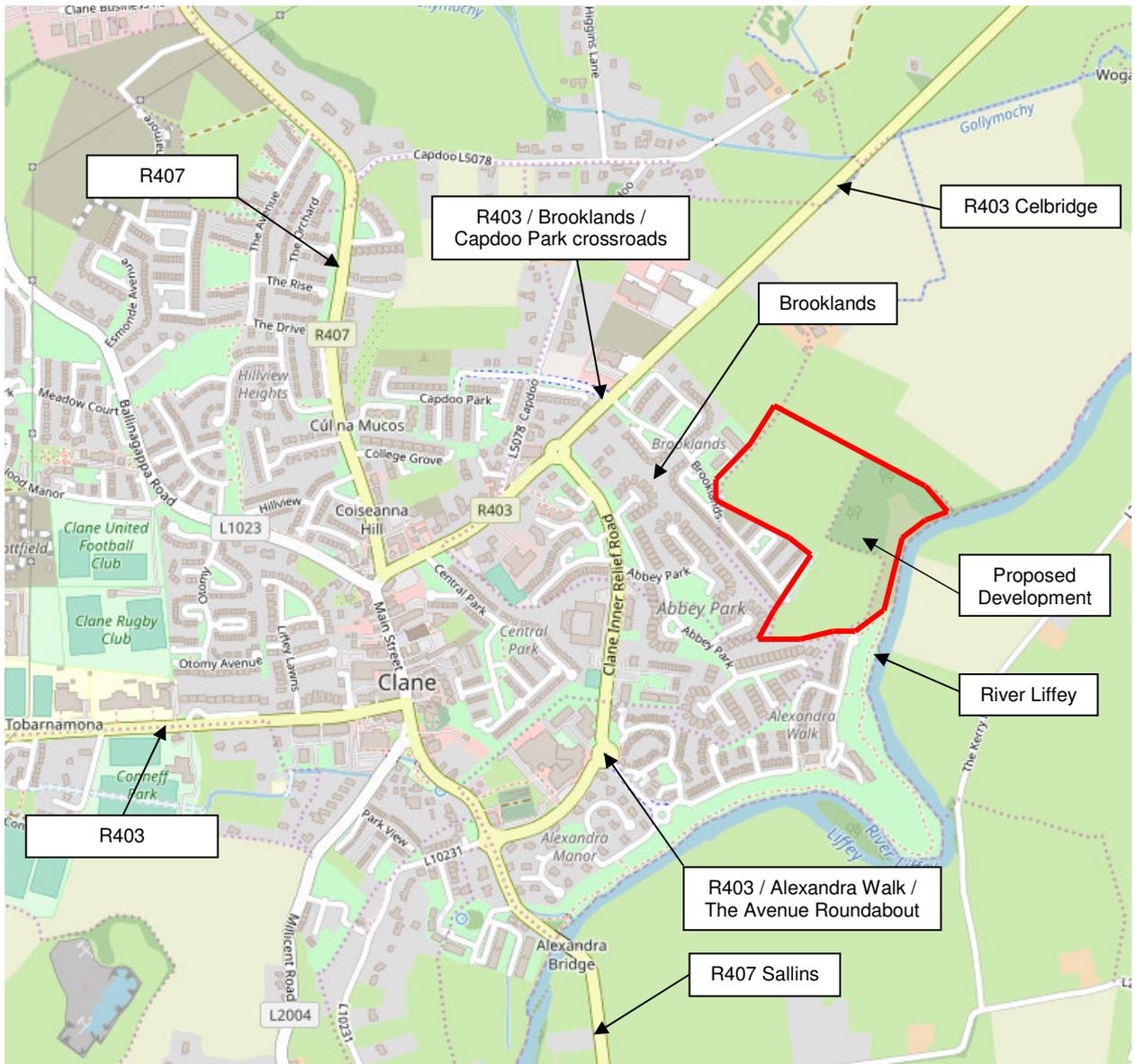


Figure 2.1: Site Location Map

The development is bounded by residential dwellings to the west and south, the river Liffey to the east and agricultural lands to the north and east.

The proposed development (planning application) is represented by the red boundary.

The planning application consists of residential units, apartments and a crèche.

Access to the proposed development will be via the existing R403 / Brooklands / Capdoo Park crossroads and via the existing R403 / Alexander Walk / The Avenue roundabout. A layout of the proposed development and its access points are shown on the Architect's drawing which is contained in Appendix A – Drawings.

2 Travel Characteristics

2.1 CSO

The Central Statistics Office website <http://census.cso.ie/sapmap/> have been used to gather data for existing travel patterns. Data gathered is from the 2016 census.

In order to determine the travel pattern of the proposed development an assessment has been based on the characteristics of the existing Capdoo area.

Capdoo is contained within 3 small size CSO areas. The areas are labelled 1, 2 and 3 on the photo below. It is considered to be appropriate to assume that the mixed development will have similar travel patterns to the existing Capdoo area. Table 2.1 shows this travel splits

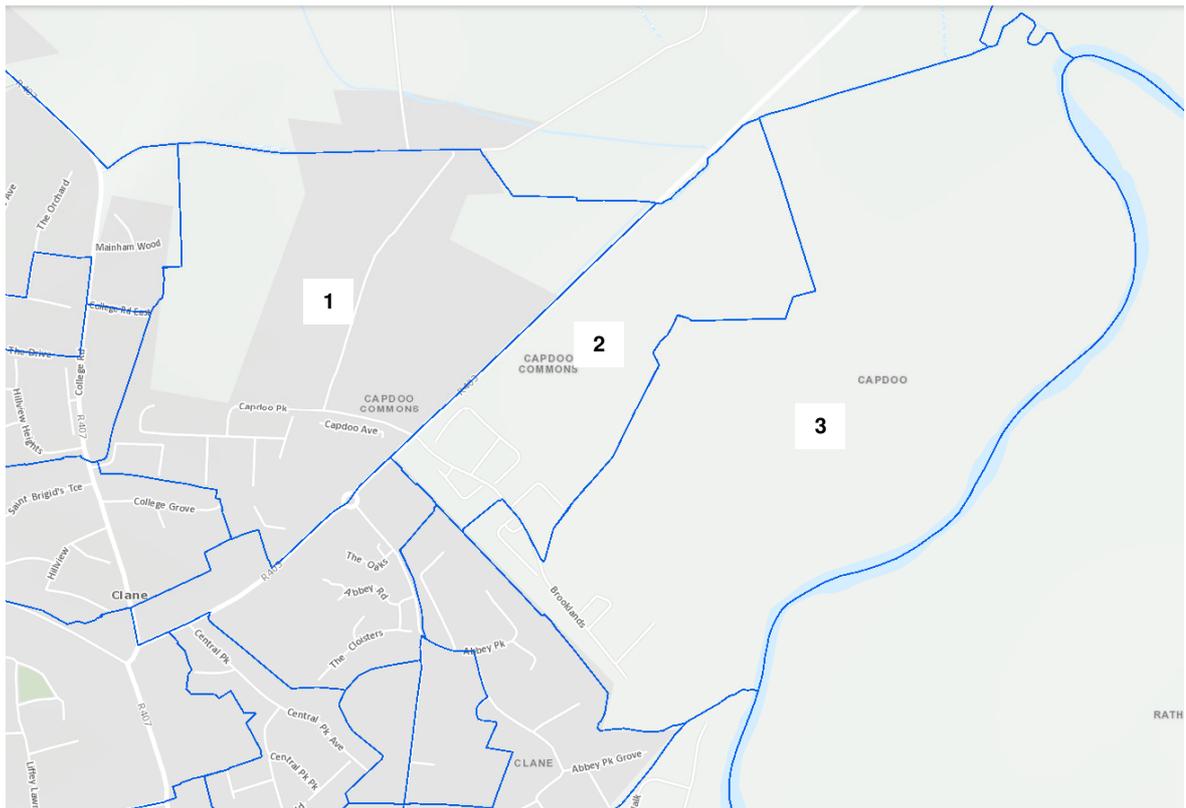


Photo 2.1: Four small size CSO areas - Capdoo

Travel Mode	Bus	Train	Car	Walk	Cycle	Other	Total
No. of Person	36	9	429	62	5	23	566
Percentage	6%	2%	76%	11%	1%	4%	100%

Table 2.1: Travel mode splits for population aged 5 years and over by means of travel to work, school or college

2.2 ESTIMATED NUMBER OF TRIPS

The TRICS database has been used to predict daily trip generation to and from the proposed development.

Item	No. of units	Daily trip rate	No of trips
Residential Dwellings	189	8.75 / unit	1653
Apartments	144	2.34 / unit	337
Crèche	485 m ²	67.16 / 100m ²	326
		Total	2316

Table 2.2: Estimated daily number of trips

The predicted number of daily trips is 2,316. The proposed development is expected to have the same modal split as listed in Table 2.1.

2.3 TARGETS

Residents, staff and customers are the three target groups for which the improvement of sustainable travel could be sought. Of these groups the residents and staff are possibly the groups for whom changes in terms of more sustainable travel modes are possible.

The travelling habits of users cannot be easily influenced by the plan. Residents of the residential section of the development often require the use of their car and similarly customers and staff coming and going to the Crèche section of the development will need their vehicles. All groups will however be encouraged to use sustainable and active travel modes where feasible.

Taking into account the development location, well-developed public transport, good local pedestrian facilities and possibility of cycling, the following initial target modal splits for staff members and residents have been established.

	On foot	Bicycle	Public transport	Car, motor bike, van	Other
Existing	11%	1%	8%	76%	4%
TARGET	16%	5%	15%	60%	4%

Table 2.3: Mobility targets

These targets should be considered as preliminary targets. It is a recommendation to carry out a detailed travel survey within 12 months of the development being occupied.

As part of an on-going monitoring and review, the percentage shifts within individual modes such as walking, cycling and public transport will be monitored to understand how successful implementation of targeted programs have been; however, the MMP is primarily concerned with an overall reduction in vehicular trips.

The targets require ongoing work and commitment without which they will not be achieved. It is recognized that some people will be easier to convert to alternative modes of travel than others and the more that is done to facilitate the use of those alternative modes of travel the more they will be used.

2.4 MOBILITY OBJECTIVES

The objectives for the proposed development are as follows:

- Reduction in car dependency as a mean of travel;
- Increased walking and cycling to work;
- Increased use of public transport;
- Increased commuting (car occupancy);
- Increased awareness and encouragement of the use of sustainable travel modes;
- Increased awareness of healthy lifestyles and exercise;
- Provision of travel information for groups involved.

3 Travel Facilities

3.1 CARS

The proposed development will have mixed use - residential and Crèche.

Access to the proposed mixed development will be via the existing R403 / Brooklands / Capdoo Park crossroads and the existing R403 / Alexandra Walk / The Avenue roundabout.



Photo 3.1 Location of Brooklands Access



Photo 3.2 Location of Alexandra Walk Access

Brooklands road is a cul-de-sac and provides access from the R403 to Brooklands residential development. It is proposed to access the development via Brooklands road. The cross-section of Brooklands road is as follows:

- 6m wide carriageway.
- 2m wide footpaths with a 1m wide grass verge are located on either side of the carriageway.
- Street lighting is provided along Brooklands road.
- The speed limit on Brooklands road is 50kph.
- The R445 is governed by a 50kph speed limit.

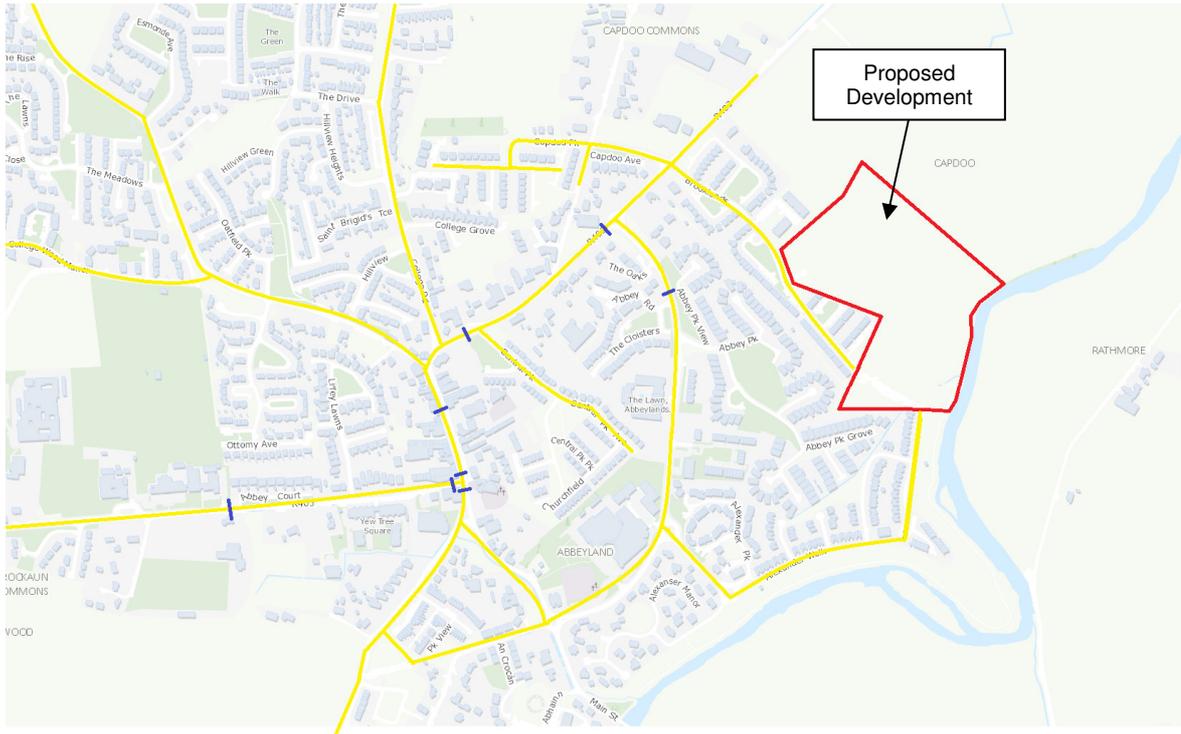
Alexandra Walk road is a cul-de-sac and provides access from the R403 to a number of residential developments. It is proposed to access the development via Alexandra Walk. The cross-section of Alexandra Walk access road is as follows:

- 6m wide carriageway.
- 2m wide footpaths with a 1m wide grass verge are located on either side of the carriageway.
- Street lighting is provided along Alexandra Walk access road.
- The speed limit on Alexandra Walk access road is 50kph.

3.2 WALKING

The Brooklands crossroads and the Alexandra Walk roundabout have pedestrian footpaths that allow travel to the north, south, east and west within the town of Clane. The Brooklands road and the Alexandra Walk road have excellent facilities for pedestrian movements with good street lighting and good interconnectivity. The existing footpaths are on average 1.5 to 2 meters wide.

Within the development all roads will have footpaths which will accommodate pedestrian movement and will connect with existing footpaths along the Brooklands Road and the Alexandra Walk road. Proposed footpaths will be 2m wide. Figure 3.1 below shows pedestrian facilities in the area.



Proposed Development — Pedestrian Crossing — Existing Pedestrian Footpaths —

Most of the roads in the Clane area have good footpath provisions that serve pedestrians and provide good linkage to various points of interest in the area, as shown in *Table 3.1*.

Good pedestrian connectivity will be a factor in encouraging residents and employees to travel by foot more as it will be convenient to do so.

Destination	Walking distance from Development Access
Tesco Metro	7 min
Clane Tennis Club	11 min
Jas Manzor The Village Inn	12 min
Clane Post office	13 min
AIB Bank	14 min
Marron's Pharmacy	15 min
The Abbey Community Centre	16 min
Super Value	13 min
The Surgery Clane	16 min
Clane Rugby Club	20 min
Scoil Bhríde Primary School	22 min
Scoil Phadraig Primary School	23 min
Scoil Mhuire Community School	24 min
Clane General Hospital	28 min

Table 3.1: Walking distances from development to various points in town

3.3 CYCLING

Certain parts of the road network within Clane have dedicated cycle lanes however this is not the case throughout the town. The majority of areas that do not have dedicated cycle lanes have got road widths that will help to accommodate cyclists. As well as this a low speed limit of 50kph throughout the area ensures that vehicles are traveling at a speed that is conducive to sharing the road with cyclists.

The road network in the area allows cyclists to easily access the greater Clane area. This would be

excellent for residents who work in the area as they could cycle to work as it would be convenient to do so.

3.4 PUBLIC TRANSPORT SERVICES

3.4.1 BUS

There are several bus stops servicing surrounding areas locally and inter county. They are located within proximity to the proposed development and they can be easily accessed by pedestrians walking to and from the development. The closest bus stops are located on the R403. There are more stops located 15 to 20 min walking distance from the proposed development.

More details on bus routes and matching destinations can be found in Table 3.2 and Table 3.3. The location of bus stops is shown on Figure 3.2.

Bus route	Bus stop	Walking distance
120	Clane opposite Maxol	5 min
120	Clane opposite Circle K	9 min
846	Cloisters	8 min
139	Clane Main Street	11 min
120	Clane opposite Aldi	16 min

Table 3.2: Bus stops

Bus route	Service
120	Go Ahead Ireland services operate 7 days per week and runs from 05:53 to 00:14, on average this service operates every half hour. This service travels between Connolly Station & UCD in Dublin City to Edenderry. Services stop at various locations including Heuston Station, Liffey Valley SC, Celbridge and Newbridge.
846	JJ Kavanagh and Sons service operates Monday to Saturday and runs from 07:20 to 18:40. On average this service operates every hour. This service travels from Clane to Naas, stopping at various location including Sallins Train Station and Naas Main Street.
139	Transport For Ireland (JJ Kavanagh and Sons) service operates 7 days per week and runs from 07:20 to 23:30. On average this service operates every hour. This service travels between Naas Hospital to Blanchardstown, via Clane, stopping at various locations including Sallins Train Station, NUI Maynooth, Leixlip (Intel Campus) and TUD Blanshardstown.

Table 3.3: Bus route numbers and destinations

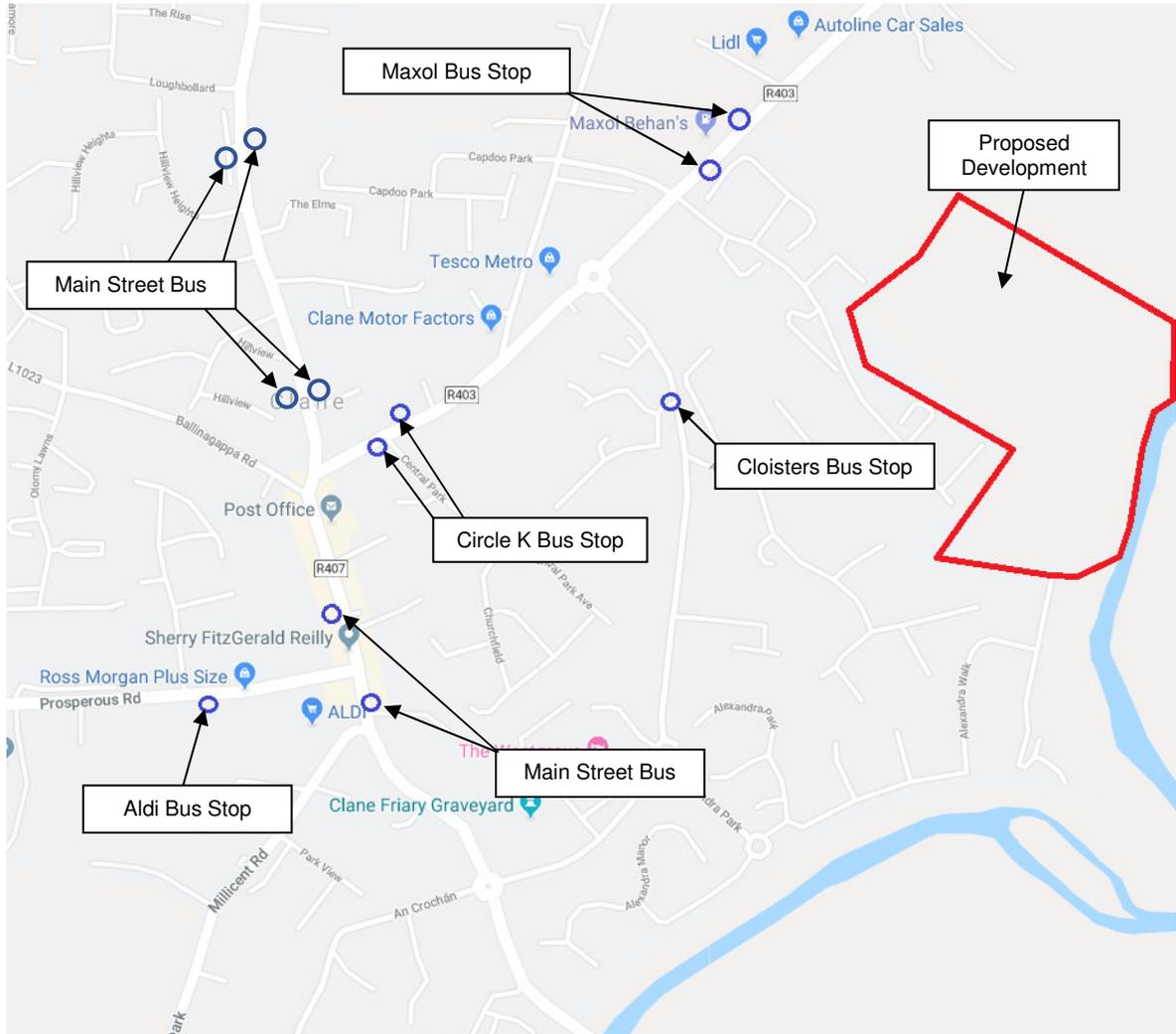


Figure 3.2: Bus stops

3.4.2 TRAIN

Clane does not have a train station however the nearby town of Sallins and Maynooth do. Sallins is easily accessible from Clane via the JJ Kavanagh & Sons route number 846. This will involve a 8 minute walk from the development to the bus stop with a 13 minute bus journey to Sallins train station.

In addition, the JJ Kavanagh & Sons route number 139 also provides access to Maynooth train station. This will involve a 11 minute walk from the development to the bus stop with a 24 minute bus journey to Maynooth train station.

The Sallins and Maynooth train station allows access too many counties within the country. The location of the train station is shown in figure 3.3 below

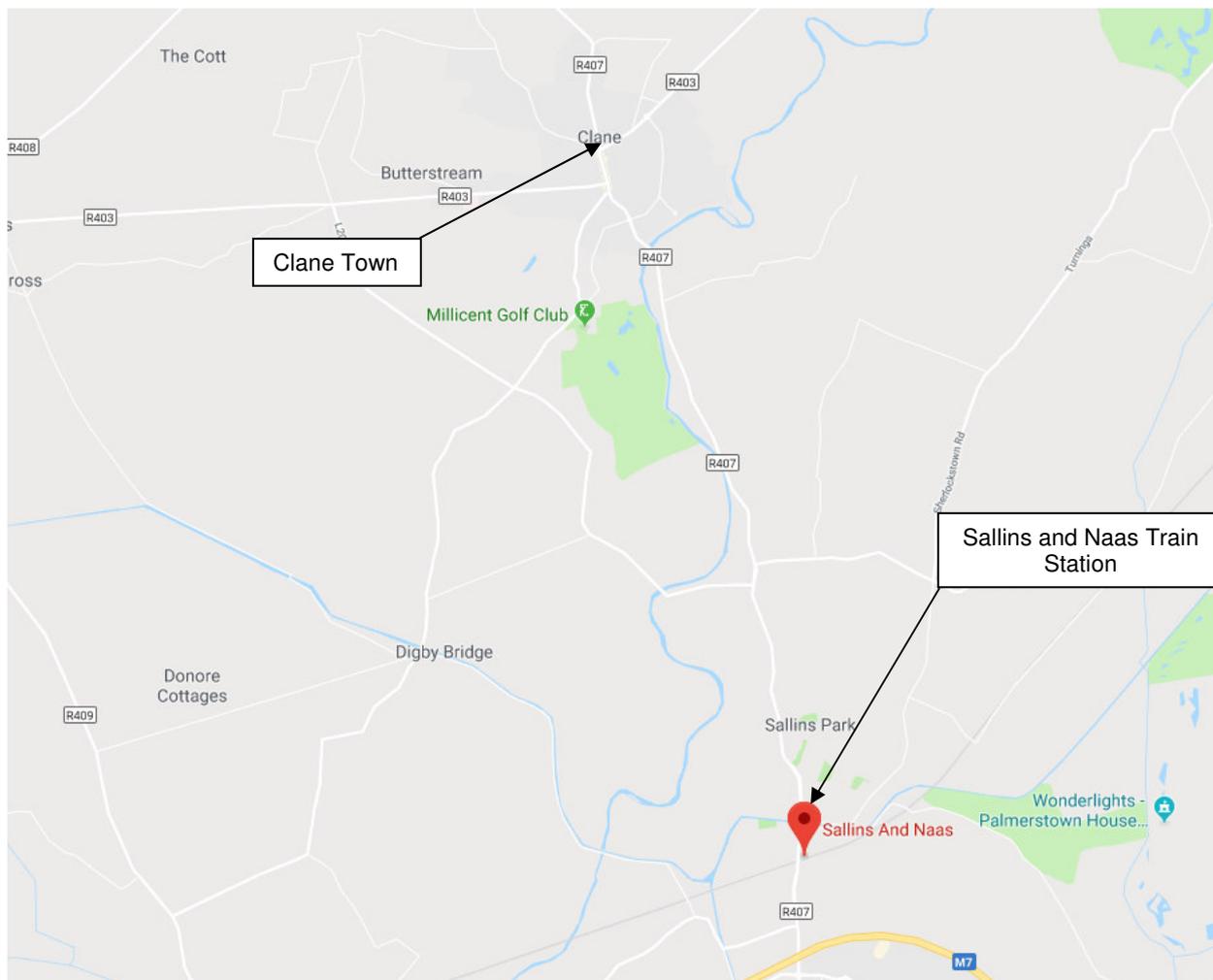


Figure 3.3 Train Station Location

Sallins is a busy train route as it serves the several different counties. A list of counties with direct routes going through Sallins can be seen below. Trains going through the town are regular and an efficient way of travelling.

Table 3.4

Train route	Service
Dublin - Cork	This service operates from 7:00 – 21:00 Monday to Saturday on average the service goes every hour
Dublin - Galway	This service operates from 7:35 – 19:35 Monday to Saturday on average the service goes every hour
Dublin - Waterford	This service operates from 7:25 – 20:15 Monday to Saturday on average the service goes every hour
Dublin – Limerick	This service operates from 7:00 – 21:35 Monday to Saturday on average the service goes every hour
Dublin - Ennis	This service operates from 7:00 – 19:00 Monday to Saturday on average the service goes every hour

Regular train services also operate between Dublin and Sligo out of Maynooth train station departing from 6am to 11pm towards Dublin and from 7.30 am to 8pm towards Sligo.

4 Proposed Measures

When considering measures for this development it must be taken into account that the proposed development is residential and contains a crèche and as a result certain mobility measures that work for residents in the proposed development may not be applicable to employees at the crèche section of the development and vice versa. As a result certain measures for the development must be divided between the residential and the commercial.

4.1 RESIDENTIAL SECTION PROPOSED MEASURES

The purpose of this Mobility Management Plan is:

- To promote and increase awareness on sustainable travel modes of travel as a part of a wider health and well-being agenda;
- To encourage / increase the use of public transport, walking and cycling.

One of the proposed measures for the development would be reducing the speed limit to 30km/h, if in line with Council's policy. It is proposed to provide a 'Slow Zone' sign within the proposed development. A layout of the sign is shown on photo 4.1 below.



Photo 4.1

In order to promote and increase awareness on sustainable travel modes of travel the Mobility Management Plan should be made available to all residents within the proposed residential development.

4.2 COMMERCIAL SECTION PROPOSED MEASURES

The measures identified are designed to both encourage changes in travel behaviour and restrict the use of private cars. The measures are designed to be implemented over a period of time, allowing costs to be spread and ensuring policies and incentives are implemented together.

To achieve the objectives as listed in *Section 2.4* the list of mobility measures have been grouped into following headings:

- Reduction in private car usage;
- Marketing and Communications;
- Walking & Cycling;
- Public Transport.

4.2.1 REDUCTION IN CAR USAGE

For those who cannot avail of public transport or live too far to walk or cycle, car sharing is the mechanism that has the highest probability to reduce travel by private car.

One of the largest contributing factors to the success of a car sharing programme is providing employees with the information regarding travel needs of other employees. A database of staff travel patterns should be compiled for that purpose. It will include staff travel and contact details in order to organise people in groups according to where they live.

The targeted car occupancy for the commercial section of the development is 1.2 persons per car, although even greater occupancy should be encouraged.

Car sharing may also be encouraged if:

- Reliable and efficient taxi services are provided as a backup for car-sharing schemes.
- Free car sharing website is used www.carsharing.ie

Information on local taxi services would also be kept on hand and their use promoted where appropriate.

CarSharing.ie
make every trip count

Join now it's FREE

Share the journey –
save money, save carbon!

www.carsharing.ie/

smartertravel >>>
>>>workplaces

1. JOIN
Register with your workplace's private car-sharing group now so that you can register lifts and start saving money and carbon! You can seek or offer lifts for work, sports, culture or other events. You can also set up your own private car-sharing groups for your own events.

2. ADD YOUR TRIP
Add your trip so that other car-sharers can get in touch to offer you a lift or to fill a spare seat in your car. The website will also automatically suggest car-sharing matches to you once your lift is added. When you contact other members of your group to request a lift or approve a request, only your email address is displayed. You can swap your mobile number at a later point if the carsharer is going ahead.

3. ARRANGE
Once you've confirmed a lift and swapped contact details, you're ready to go! For social and safety tips and other FAQs on car-sharing, see www.carsharing.ie/faq

4. DRIVE
Take the stress out of driving, while also:
 • saving money on fuel, tolls, parking, wear and tear on your car;
 • reducing the number of cars on the road, which decreases congestion and cuts journey times, as well as reducing CO2 and other emissions associated with car use;
 • meeting new colleagues or people living in your area!

For more information, contact:
 National Transport Authority, Don't Drive, Blackart Lane, Dublin 7
 01-856-6666 ext 2000, Car-sharing, Lift & Phoning, Safe, 4th Floor 2
 info@carsharing.ie and work@carsharing.ie
www.carsharing.ie

Figure 4.1. Car Sharing Leaflet

4.2.2 MARKETING AND COMMUNICATIONS

Marketing and communications will include promotional initiatives and activities aimed at informing the staff and visitors of the existing transport networks. Such initiatives and activities will include:

- Set up an on-site Travel Information Point in the form of display board within the crèche;
- Display local travel information leaflets;
- Display posters on active travel initiatives available in the area (e.g. cycle training, healthy walks, participate in National Bike Week events, Participate in an annual Pedometer Challenge).
- Create and display an Access Map for the proposed development that shows:
 - public transport facilities available in the area,
 - safe walking and cycling routes and
 - time to walk/cycle from key areas/nodes and nearby public transport facilities.

An information and awareness campaign should begin as soon as the development is occupied. It should include provision of travel information to staff members first and secondly customers. All travel information can be compiled in a Mobility Fact Sheets/Maps. These factsheets would outline the benefits of sustainable travel mode activities and also provide information on routes, groups, links to further information, etc.

In addition, a formalised Sustainable Travel Pack can be provided to employees prior to commencing work for the first time. The Pack will contain all the information relating to the Mobility Management Plan including the Access Map, the Fact Sheets, information on the “Bike to Work” and “Tax Saver” schemes, information on the location of cycle parking etc.

4.2.3 WALKING AND CYCLING

Due to the location of the proposed development and the excellent pedestrian facilities throughout Clane town walking and cycling should be encouraged for employees working within Clane. In order to do this the following measures are proposed:

- Identify safe walking and cycling routes in the area of a radius of at least 5 km around the development. Show the routes in the Access Map. The routes will take notice of:
 - Availability of footpaths and cycle paths;
 - Safety at crossings;
 - Signage and Lighting.
- Provide umbrellas at reception to borrow on wet days;
- Provide space for drying cloths and equipment;
- Monitoring if existing cycle parking meets the demand and provide more cycle parking spaces if required;
- Supply a toolkit containing puncture repair equipment, pump, etc. for use in emergencies and make it available to bicycle users;
- Ensure that appropriate changing and shower facilities are available, including sufficient storage space;
- Advertise the Government's Cycle to Work Initiative (www.bikescheme.ie, www.biketowork.ie) which allows employees to purchase bicycles, bicycle equipment and safety equipment tax free and ensure that information is distributed amongst staff.
- Cycling safety training;
- Bicycle maintenance classes;
- Bicycle mileage rate allowance;
- Support the establishment of a Bicycle Users Group (BUG) where cyclists can work together to encourage cycling and improve facilities for cyclists;
- Company bicycles to use;
- Organise events such as ‘Cycle to Work Day’ or similar.

4.2.4 PUBLIC TRANSPORT

For employees that live too far away to walk or cycle to work public transport should be encouraged using the following measures

- Ensure that information given in the Access Map include the location of stops, routes, timetables, walking times to main public transport facilities, etc.
- Publicise and promote changes / improvements to public transport provision.

4.2.5 IMPLEMENTATION OF MOBILITY MEASURES

To implement the Mobility Measures the following steps would be taken:

- Establish a named Mobility Management Coordinator and Steering Group through which all decisions should be made in relation to the implementation of the proposed measures.

- Implement an awareness campaign to promote the Mobility Measures:
 - Leaflets/ Mobility Fact Sheets/newsletter/website;
 - Presentations to staff members and residents;
 - Information campaigns should be repeated regularly.
- Implement the recommended measures.
- Monitor and review, by the Steering Group, of the achievement of targets at regular intervals. Reviews should include a full survey amongst all staff members within the creche and all residents within the development, including modal splits and origin of trips. After initial evaluation, the recommended interval for reviews is once a year.

In order to promote and increase awareness on sustainable travel modes of travel the Mobility Management Plan should be made available to all creche employees and residents.

6 Conclusion

The location of the proposed development makes it convenient to adopt sustainable travel modes.

- It has very good pedestrian and cycling connectivity with points of interest in the area (schools, banks, shops);
- Footpaths are wide enough to accommodate higher number of pedestrians;
- There are a number of pedestrian crossings on all major roads in the area;
- Several roads in the vicinity have dedicated cycle lanes and those that don't are wide enough to safely accommodate cyclists;
- The site is well-served by existing public transport links with several bus-stops located within walking distance.
- 557 car parking spaces are to be provided for the residential section of the development, which is deemed to be sufficient to serve the demand.
- 18 car parking spaces and 11 bicycle parking spaces are to be provided for the crèche section of the development, which is deemed to be sufficient to serve the demand.
- An information and awareness campaign should begin as soon as the development is occupied.
- The preliminary targets are outlined in *Table 2.3* above, based on the 'existing' travel modal splits and the opportunities of the site.
- It is expected that the proposed development will generate 2,316 daily trips;
- Several measures are proposed for the development which are divided between the residential and the crèche section of the development.
- With mobility measures implemented, this should lead to a decrease in the car usage compared to the car usage percentage taken from the CSO Statistics as described in *Chapter 2.2* and initial targets should be met. It is emphasised that failing to meet initial targets should not be a failing, but rather an opportunity to engage and develop a more sustainable, successful and specific solution for the development.

APPENDIX A – DRAWINGS

KEY

	SITE BOUNDARY
	SITE AREA = 103,626 m ² / 10.36 H.A
	LAND OWNERSHIP EXTENDS BEYOND DRAWING. FUTURE DEVELOPMENT

DEVELOPMENT SCHEDULE	
UNIT	QUANTITY
4 Bed - Semi-Detached Unit Type A	12
4 Bed - Semi-Detached Unit Type B	08
3 Bed - Semi-Detached Unit Type A	18
3 Bed - Semi-Detached Unit Type B	20
3 Bed - Detached Unit	01
3 Bed - Terrace	39
2 Bed - Terrace	23
2 Bed - Maisonette	12
1 Bed - Maisonette	08
Duplexes	56
Apartment Block A&B	94
Apartment Block C	09
Apartment Block D	23
Apartment Block & Creche	10
GRAND TOTAL =	333 units



NOTE: LAND OWNERSHIP EXTENDS BEYOND DRAWING. FOR FULL EXTENT OF LAND OWNERSHIP PLEASE REFER TO SITE LOCATION PLAN



1 Proposed Site Plan
1 : 1000

Rev	Date	Description	Issued By
P09	08/12/2020	Revision of tree impact 01	
P08	07/12/2020	Revision of tree impact	
P07	25/11/2020	Draft Issue for planning	vm
P06	20/11/2020	Revision of Phase 1 Layout	
P05	04/11/2020	Hedge 10 Revision	vm
P04	02/11/2020	Revision of south-western corner	vm
P03	30/10/2020	Revision of comments	VM
P02	28/10/2020	Revision of parking spaces	vm
P01	08/12/2020	Issue for Planning	VM

Project Stage
Planning

Client:
Westar Investments Ltd.

Project:
Residential SHD Development @ Clane

Drawing Title:
Proposed Site Plan

Drawn	Checked	Paper Size	Scale	@A1	Date
VM	JM	A1	As indicated		08/12/2020

Project No.	Drawing No.	Classification	Revision
PE20057	0001		P09

File Name:
PE20057-CWO-ZZ-ZZ-DR-A-0001

Status:
S1 - Suitable For Coordination



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